October, 1928] VAN DUZEE—DOLICHOPODIDÆ

NEW NORTH AMERICAN SPECIES OF DOLI-CHOPODIDÆ (DIPTERA)

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Chrysotus emarginatus Van Duzee, new species

Male. Length 2.5 mm. Face very narrow (the head is shrunken in the type, but seems to show a narrow line of white face); palpi small, black; front dull green; antennæ black, small, third joint rounded, wider than long, with a notch at tip for the insertion of the arista; lower orbital cilia pale.

Thorax dark green, dorsum dulled with brown pollen, posterior part of dorsum and the scutellum with blue reflections; abdomen green with black hair; hypopygium concealed, its appendages very small.

Fore coxæ yellow with a few black hairs; all femora and tibiæ yellow; fore femora with rather long pale hairs below, posterior femora with their longest hairs above; all tarsi yellowish, brown toward their tips; fore tibiæ as 45, their tarsi as 64; joints of fore tarsi as 28-13-10-7-6; fore pulvilli as 5; joints of middle tarsi as 31-15-10-7-6; first two joints of posterior tarsi as 22-18. Calypters, their cilia and the halteres yellow.

Wings grayish; third and fourth veins parallel, fourth ending in the apex of the wing; cross-vein before the middle of the wing; last section of fifth vein 38, cross-vein 11 fiftieths of a millimeter long.

Described from one male, taken by C. N. Ainslie, at Sioux City, Iowa. Type in the United States National Museum.

This is something like *flavipes* Loew, but is smaller and the third antennal joint is of quite different shape.

Chrysotus flavicauda Van Duzee, new species

Male. Length 1.5 mm. Face very narrow; palpi whitish, rather small; front black; antennæ black, third joint twice as wide as long, rounded, a little flattened at tip, arista apical; orbital cilia whitish.

Thorax green with brown pollen on the dorsum; abdomen green, short, its hair black; hypopygium yellowish, prominent, extending downward in a stout, curved appendage which is mostly yellow.

All coxæ green, anterior pair with yellow tips and conspicuous white hair; all femora yellow, fore and middle ones blackened around the middle, posterior pair with apical half black; all tibiæ wholly yellow; hairs of posterior tibiæ short; tarsi infuscated from tip of first joint; joints of middle tarsi as 19-9-5-4-4; those of posterior pair as 15-11-7-5-5. Calypters and halteres yellow, the former with black cilia. Wings grayish; third and fourth veins parallel, fourth reaching the wing margin before the apex of the wing; crossvein at basal third of wing; last section of fifth vein 30, cross-vein 6 fiftieths of a millimeter long.

Described from one male, taken by C. N. Ainslie, at Sioux City, Iowa. Type in the United States National Museum.

This is a little like *annulatus* Van Duzee, but differs in having the fore and middle femora blackened in the middle and in having the cilia of the calypters black; the third antennal joint is also of different form.

Gymnopternus tenuicauda Van Duzee, new species

Male. Length 2.5 mm. Face wide above, a little narrowed below, silvery white; front blackish with brown pollen; antennæ wholly black, third joint acorn-shaped in outline, a little longer than wide; arista as long as from the vertex to the oral margin of the face; orbital cilia wholly black.

Thorax and abdomen blackish green, not very shining; abdomen with gray pollen and black hairs; these hairs appear brown in certain lights, especially those on upper part of the dorsum and the long ones on posterior edge of fifth segment; hypopygium very small and slender for the genus, tapering to a point at tip, reaching forward beyond the posterior margin of third segment, with a petiole formed of two small segments.

Coxæ and femora black, extreme tips of coxæ, trochanters and extreme base and tips of femora yellow; fore and middle tibiæ and base of their tarsi yellow, apical part of these tarsi infuscated; hind tibiæ black on apical half or more, basal part more yellowish, especially above; hind tarsi wholly black; joints of fore tarsi as 26-10-7-6-7; of posterior ones as 22-28-20-20-10. Calypters and halteres yellow, cilia of the former black.

Wings grayish; third and fourth veins parallel, cross-vein 17, last section of fifth vein 32 fiftieths of a millimeter long.

Described from one male, taken by C. S. Brimley, May 4, 1926, at Raleigh, North Carolina. Type presented to the United States National Museum by C. S. Brimley.

Gymnopternus tibialis Van Duzee, new species

Male. Length 3-3.2 mm. Face silvery white with a few black hairs near the lower margin, wide, its sides parallel; front covered with brown pollen; antennæ wholly black, third joint somewhat acorn-shaped, scarcely longer than wide.

Thorax and abdomen blackish green, the latter with grayish pollen on the sides, its hair black; hypopygium black, large, its lamellæ black, rather small, appearing nearly round, central filament yellow.

Coxæ and femora black, extreme tips of coxæ, the trochanters and extreme tips of femora yellow; hairs on fore coxæ short, black; fore and middle tibiæ and basal part of their tarsi yellow or brownish yellow; posterior tibiæ and tarsi black, the tibiæ yellowish at base, especially above; joints of fore tarsi as 24-10-8-5-7; first three joints of posterior tarsi as 22-28-16. Calypters and halteres yellow, cilia of the former black.

Wings dark grayish; third and fourth veins nearly parallel; last section of fifth vein 28, cross-vein 16 fiftieths of a millimeter long. Female. Like the male in color except that the wider face is

covered with grayish pollen, not white as in the male.

Described from three males and two females, all taken by C. S. Brimley, May 4 and 6, 1926, at Raleigh, North Carolina. Type presented to the United States National Museum by C. S. Brimley.

Pelastoneurus quadricincta Van Duzee, new species

Male. Length 4.5 mm. Face wide, covered with white pollen below the suture, which is a little above the middle; palpi large, covered with white pollen; antennæ black, first joint a little yellow below at tip; arista as long as the antennæ, feathered with rather short hairs on apical half; the short orbital cilia wholly black.

Thorax and abdomen black, shining; the velvety black stripe above the root of the wing broad and distinct; apparently no white spot on the suture; abdominal segments with large spots of white pollen on the sides of the segments; last segment wholly white pollinose; hypopygium black, large, sessile, its outer lamellæ black, long, rather narrow, fringed with stout black hairs, those on inner edge shortest, with their tips bent and furnished with several stout black bristles at apex; inner appendages a pair of shorter lamellæ with two short stout hairs at tip.

Coxæ black with very narrow yellow tips, covered with gray pollen, anterior pair almost bare; femora and tibiæ dark yellow; posterior tibiæ black on upper edge at base for a short distance, with four black spots; middle pair more brownish yellow; tarsi brown, yellowish at base; first joint of fore tarsi with four spines below, which are nearly as long as the diameter of the joint; joints of fore tarsi as 34-12-10-7-10. Calypters and halteres yellow, cilia of the former black.

Wings grayish; cross-vein slightly margined with brown; last section of fourth vein arched so as to approach third at tip (about as in Plate I, figure 1, Ann. Ent. Soc. Am., Vol. xvi, March 1923).

Described from one male, taken by C. S. Brimley, April 15, 1925, at Willard, North Carolina. Type presented to the United States National Museum by C. S. Brimley.